



Naval Medical Logistics Command

DEMAND DATA SYSTEMS ANALYSIS

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NMLC - OBJECTIVES

- Match NSN information to current material being bought in the healthcare industry
- Enrich the NSN and NH Oak Harbor item file data. Provide enriched data for any of the provided data elements that DDS is capable of enriching.
- Provide a cost comparison on commercial pricing using Government Purchase Card as a method of payment against current GPO pricing.



DSCP- OBJECTIVES

- DSCP asked NMLC provide input on two objectives when evaluating DDS' capabilities. They were:
 - DDS' ability to provide a statistically valid sample of what is being purchased, and therefore produced in the commercial sector.
 - DDS' ability to standardize and synchronize data provided to them electronically by DSCP or any other customer.



ORIGINAL DATA FILES

- DDS received two files electronically:
 - File 1 - Naval Hospital Oak Harbor, WA. The file consisted of the following data elements:
 - Supplier Name
 - Item ID
 - Original Order Date
 - SOS Code/Name + Order Call Number
 - Item ID and Description
 - UOP Code
 - Qty Requested
 - Qty Cancelled
 - Qty Due-in
 - UOP Price
 - Order dollars
 - Cancelled orders
 - PC order \$'s
 - User ID
 - Document Number
 - Order Document Number



ORIGINAL DATA FILES (cont)

- File 2 – this file consisted of 13,696 line items of NSN information extracted from DMLSS and provided using Microsoft Excel. The file had the following data elements:
 - NSN
 - Item ID
 - Manufacturer
 - Description
 - UOM
 - Pack Factor
 - Unit Cost
 - Cost



DATA ANALYSIS - FILE 1

- 5186 Original items transmitted. Analysis yielded the following results:
 - 74% successfully mapped (3840)
 - 26% remains to be mapped. This was a single-run only
 - 2296 were unique item (1544 duplicates)
 - 724 items identified distributors as primary manufacturers, causing data to be aggregated incorrectly at any level (DMLSS/R/W). I believe this is a pandemic (system-wide issue).
 - 777 records had wholly incorrect Item ID numbers. This is attributable to:
 - Leading zeros
 - Dashes where the distributor doesn't recognize them
 - Updated product ID. Complete disagreement between what the customer and DDS provided (this needs validation)..... The DDS data is being used by providers and customers daily (I would rely on the use of DDS more than DoD).
 - Of the 777 incorrect Item ID's - DDS enriched 118



DATA ANALYSIS - FILE 1 (cont)

- Corrected Manufacturer's Name -
 - 4,780 manufacturer names successfully mapped (92%)
 - 1195 records required some form of enrichment:
 - Spelling errors
 - Outdated manufacturer names
 - Redundancies referring to the same company -
 - Allegiance, Allegiance Healthcare, Allegiance Healthcare, Inc., Allegiance Healthcare Incorporated
 - Some enrichment examples include:
 - Allegiance to Precision Medical
 - Fisher Healthcare to Biochemical Sciences Inc.
 - Philips Medical Systems to Philips Marconi
- DDS easily mapped current parent, manufacturer, division relationships within the Healthcare Industry.
- DDS used their standardized naming convention.
- DDS can use DoD standardized manufacturer name.



DATA ANALYSIS - FILE 1 (cont)

- Corrected Manufacturer's Name (Inconsistencies) –
 - Item ID 345EN and 345FCT – DDS provided two manufacturer naming descriptions:
 - Ruhof Corporation
 - Ruhof Corp. (It should be noted that this was the only obvious discrepancy I found in their manufacturer data file)
 - There is no standardized approach to dealing with company descriptors. For example:
 - Incorporated vs. Inc.
 - LLC
 - Corp. vs. Corporation
 - Recommendation: Suggest that if DoD uses this technology DSCP upload their standardized naming convention.



DATA ANALYSIS - FILE 1 (cont)

- Distributor cross-referencing:
 - Allegiance: 404 cross-references provided.
 - McKesson: 283 cross-references provided.
 - Owens and Minor: 465 cross-references provided.
- DDS mapping technology could provide DoD cross-referencing for all strategic Med/Surg PV, contingency, and readiness applications:
 - Master catalog PV conversion files
 - MCF
 - Broad Contract Coverage
 - VMI
 - AMAL/ADAL readiness



DATA ANALYSIS - FILE 1 (cont)

- Price Analysis Input
 - Concerns:
 - NH Oak Harbor using \$.01 as a place holder
 - DMLSS UOM and DDS UOM may be comparing apples to oranges
 - Duplicate contract pricing provided (on a few Item ID's) for Premier, Novation, Broadlane and Amerinet - how can this be?
 - Few of the GPO prices were \$1 - UOM (pack factor) discrepancy.
 - Difficult analyzing zero-transaction data (not realistic). That said, projected savings on the single file was \$67K using Tier 1 GPO pricing.
 - Detailed price analysis requires more time.



DATA ANALYSIS - FILE 2

- NSN/Item ID: NMLC provided DDS 13,696 NSN's. All NSN's had commercial product ID numbers. The NSN's were limited to the following FSC's:
 - 6510
 - 6515
- DDS mapped 3803 (28%) Item ID's. It is critical to understand the value of this function. Incorrect NSN-to-Item ID is a major problem for the services.
- Distributor cross-references were provided for 7036 Item ID's (52%). With more time, DDS could have matched ALL NSN's using Item ID, Manufacturer, and Description as second, third and fourth-level sort criteria.
- Standardized Manufacturer's Name:
 - Where there was commonality between files 1 & 2 - DDS provided the same root manufacturer.
 - File 1: 439 original manufacturers; 125 DoD matched to DDS; DDS refined 125 down to 89.
 - File 2: 1262 original manufacturers; 169 DoD matched to DDS; DDS refined 169 down to 100.
 - 91 common manufacturers between files; remaining are unmatched, unique manufacturers.



DATA ANALYSIS - FILE 2 (cont)

- Distributor Cross-referencing:
 - DDS mapped all 13,696 NSNs. On distributed items, DDS was able to cross-reference Allegiance, O&M and McKesson.
 - Allegiance - 3519 matches (25%)
 - McKesson - 2668 matches (19%)
 - O&M - 3505 matches (25%)
 - Retail operations using NSN, not up-to-date commercial Item ID's complicates this problem.
 - Use 2nd, 3rd, and 4th position mapping functions to successfully map beyond the the NSN.
- Price Comparison - without any transactional data (single-instance orders), the projected savings using Tier 1 GPO pricing was \$70K.



BENEFITS/ACCURACY & EXPEDIENCY

BENEFITS

- Normalizing systems across Service (Navy, Army, Air Force) systems
- Complete DoD catalog mapping EVERY NSN to EVERY equivalent in industry
- The appropriate aggregation of sales data to include utilization and velocity
- Unit-of-purchase/Unit-of-measure price management to automatically calculate pack factor pricing

ACCURACY/EXPEDIENCY

- Online, ASP connection, aggregate analysis for corporate and enterprise use (DSCP). Wholesale capabilities of all retail field operations. DDS provided "real-time" information. I maneuvered through their ASP quickly.



SYNCHRONIZATION VS. ENRICHMENT OPEN DISCUSSION

- What do the Services and DSCP want in:
 - Enrichment
 - The act of correcting “bad” data before it ever gets synchronized....
 - Synchronization
 - Repopulation of “bad” data with correct data across the supply chain from manufacturer, distributor, GPO, and retail and wholesale operations.....

DISCUSSION